

system-wide monitoring program

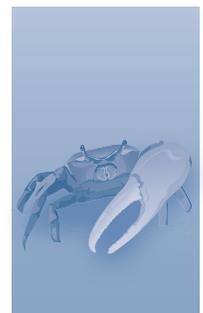
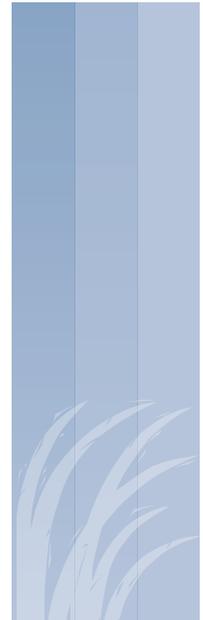
The System-wide Monitoring Program measures changes in estuarine water quality to track the health of our nation's National Estuarine Research Reserves and coastal areas. It provides valuable long-term data on water quality and weather at high frequency time intervals to researchers, natural resource managers and other coastal decision makers. As funds become available, there are plans to expand the program to monitor the effects of land use on critical habitats and water quality conditions.

In order to understand changes in water quality, reserve staff use automated dataloggers to collect data on water depth, temperature, salinity, dissolved oxygen, turbidity (cloudiness or clarity) and pH. These data are critical indicators of environmental conditions for numerous estuarine species. The measurements are taken at 30 minute intervals at four stations within each of the 26 reserves.

Each reserve also has a weather monitoring station. Weather patterns have a major impact on estuarine habitats. Storms increase runoff into an estuary and can influence its temperature, salinity, dissolved oxygen, turbidity and pH.

The System-wide Monitoring Program has already provided some coastal managers with a tool to make informed decisions on local and regional issues, such as "no discharge zones" for boats, agricultural practices and urban runoff pollution. As the program expands, the ability to correlate specific land use practices with the health of our estuaries will increase on a national level. It also will increase our understanding of how estuaries function and change naturally over time.

Monitoring data for each reserve are available from the reserve system's Centralized Data Management Office at <http://inlet.geol.sc.edu/cdmohome.html>.



United States Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service, Office of Ocean & Coastal Resource Management

nerrs.noaa.gov

